



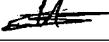
1fw
Docket: MA9658DIV4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: /
Fraser et al. / Group Art Unit: 1632
/ /
Serial No: 10/614,648 / /
/ /
Filed: July 7, 2003 / Examiner: unknown
/ /
FOR: SYSTEMS AND METHODS FOR /
TREATING PATIENTS WITH /
PROCESSED LIPOASPIRATE CELLS /
/

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service, First Class mail, postage prepaid, in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 23, 2004.
STOUT, UXA, BUYAN & MULLINS, LLP


Kenton R. Mullins, Reg. No. 36,331

TRANSMITTAL

Sir:

Submitted herewith are

- ~ Return Receipt postcard;
- ~ Information Disclosure Statement;
- ~ PTO-1449 21 Sheets;
- ~ The Commissioner is hereby authorized to charge any needed fees to deposit account 50-1600.

Respectfully submitted,


Kenton R. Mullins
Attorney for Applicants
Reg. No. 36,331

June 23, 2004
4 Venture, Suite 300
Irvine, CA 92618
Telephone: (949) 450-1750
Facsimile: (949) 450-1764



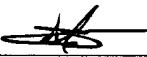
Docket: MA9658DIV4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: /
Fraser et al. / Group Art Unit: 1632
/ /
Serial No: 10/614,648 /
/ /
Filed: July 7, 2003 / Examiner: unknown
/ /
FOR: SYSTEMS AND METHODS FOR /
TREATING PATIENTS WITH /
PROCESSED LIPOASPIRATE CELLS /
/ /

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service, First Class mail, postage prepaid, in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 23, 2004.
STOUT, UXA, BUYAN & MULLINS, LLP


Kenton R. Mullins, Reg. No. 36,331

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. 1.56 and 1.97, Applicants wish to call the attention of the Examiner to the references that are listed on the attached PTO form 1449. In accordance with 37 C.F.R. section 198(d)(1)(2), copies of all 291 references in the enclosed PTO form 1449 are not provided as they have previously been provided in U.S. Serial No. 10/316,127 filed December 9, 2002, for which the subject application claims priority

Applicants respectfully request that the cited references be listed on the face of any patent issuing from this application.

These citations do not constitute an admission that the references are relevant or material to the claims, but rather only constitute the closest art of which Applicants are presently aware.

Respectfully Submitted



Kenton R. Mullins
Attorney for Applicants
Registration No. 36,331

June 23, 2004
4 Venture, Suite 300
Irvine, CA 92618
949-450-1750

INFORMATION DISCLOSURE CITATIONS
(Use several sheets if necessary)JUN 28 2004
U.S. PATENT DOCUMENTS

Docket Number (Optional)

MA9658DIV4

Application Number

10/614,648

Applicant(s)

Fraser et al.

Filing Date

7/7/03

Group Art Unit

1632

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		6,200,606	03/13/2001	Peterson et al.			
		5,035,708	07/20/1991	Alchas et al.			
		5,372,945	12/13/1994	Alchas et al.			
		5,786,207	07/28/1998	Katz et al.			
		4,820,626	04/11/1989	Williams et al.			
		4,883,755	11/28/1989	Carabasi et al.			
		5,486,359	01/23/1996	Caplan et al.			
		4,458,678	07/10/1984	Yannas et al.			
		5,837,235	11/17/1998	Mueller et al.			
		5,409,833	04/25/1995	Hu et al.			
		6,316,247	11/13/2001	Katz et al.			

FOREIGN PATENT DOCUMENTS

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	EP0570331	11/18/1993	Europe				
	WO8702812	07/11/1987	WIPO				
	WO8601111	02/27/1986	WIPO				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

U.S. Application No. 09/936,665, filed 9/10/2001, Katz et al., Adipose-Derived Stem Cells and Lattices

U.S. Application No. 09/952,522, filed 9/10/2001, Katz et al., Adipose-Derived Stem Cells and Lattices

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)	MA9658D1V4	Application Number	10/614,648
Applicant(s)	Fraser et al.		
Filing Date	7/7/03	Group Art Unit	1632

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Avital, I., D. Inderbitzin, et al. (2001). "Isolation, characterization, and transplantation of bone marrow-derived hepatocyte stem cells." <i>Biochem Biophys Res Commun</i> 288(1): 156-64.
	Carmeliet, P. and A. Luttun (2001). "The emerging role of the bone marrow-derived stem cells in (therapeutic) angiogenesis." <i>Thromb Haemost</i> 86(1): 289-97.
	Castro-Malaspina, H., W. Ebell, et al. (1984). "Human bone marrow fibroblast colony-forming units (CFU-F)." <i>Prog Clin Biol Res</i> 154: 209-36.
	Coleman, S. R. (1995). "Long-term survival of fat transplants: controlled demonstrations." <i>Aesthetic Plast Surg</i> 19(5): 421-5.
	Coleman, S. R. (2001). "Structural fat grafts: the ideal filler?" <i>Clin Plast Surg</i> 28(1): 111-9.
	Coleman, W. P., 3rd (1991). "Autologous fat transplantation." <i>Plast Reconstr Surg</i> 88(4): 736.
	Connolly, J. F. (1998). "Clinical use of marrow osteoprogenitor cells to stimulate osteogenesis." <i>Clin Orthop(355 Suppl): S257-66.</i>
	Eremia, S. and N. Newman (2000). "Long-term follow-up after autologous fat grafting: analysis of results from 116 patients followed at least 12 months after receiving the last of a minimum of two treatments." <i>Dermatol Surg</i> 26(12): 1150-8.
	Fukuda, K. (2001). "Development of regenerative cardiomyocytes from mesenchymal stem cells for cardiovascular tissue engineering." <i>Artif Organs</i> 25(3): 187-93.
	Guerrerosantos, J., A. Gonzalez-Mendoza, et al. (1996). "Long-term survival of free fat grafts in muscle: an experimental study in rats." <i>Aesthetic Plast Surg</i> 20(5): 403-8.
	Horwitz, E. M., D. J. Prockop, et al. (1999). "Transplantability and therapeutic effects of bone marrow-derived mesenchymal cells in children with osteogenesis imperfecta." <i>Nat Med</i> 5(3): 309-13.
	Horwitz, E. M., D. J. Prockop, et al. (2001). "Clinical responses to bone marrow transplantation in children with severe osteogenesis imperfecta." <i>Blood</i> 97(5): 1227-31.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
MA965801U4

Application Number
10/614,648

Applicant(s)
Fraser et al.

Filing Date

7/7/03

Group Art Unit
1632

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Huang, J. I., S. R. Beanes, et al. (2002). "Rat extramedullary adipose tissue as a source of osteochondrogenic progenitor cells." <i>Plast Reconstr Surg</i> 109(3): 1033-41; discussion 1042-3.
	Hutley, L. J., A. C. Herington, et al. (2001). "Human adipose tissue endothelial cells promote preadipocyte proliferation." <i>Am J Physiol Endocrinol Metab</i> 281(5): E1037-44.
	Kern, P. A., A. Knedler, et al. (1983). "Isolation and culture of microvascular endothelium from human adipose tissue." <i>J Clin Invest</i> 71(6): 1822-9.
	Lee, J. H., Z. Ilic, et al. (1996). "Cell kinetics of repair after allyl alcohol-induced liver necrosis in mice." <i>Int J Exp Pathol</i> 77(2): 63-72.
	Lee, P. E., R. C. Kung, et al. (2001). "Periurethral autologous fat injection as treatment for female stress urinary incontinence: a randomized double-blind controlled trial." <i>J Urol</i> 165(1): 153-8.
	Mizuno, H., P. A. Zuk, et al. (2002). "Myogenic differentiation by human processed lipoaspirate cells." <i>Plast Reconstr Surg</i> 109(1): 199-209; discussion 210-1.
	Murayama, T., O. M. Tepper, et al. (2002). "Determination of bone marrow-derived endothelial progenitor cell significance in angiogenic growth factor-induced neovascularization in vivo." <i>Exp Hematol</i> 30(8): 967-72.
	Murry, C. E., R. W. Wiseman, et al. (1996). "Skeletal myoblast transplantation for repair of myocardial necrosis." <i>J Clin Invest</i> 98(11): 2512-23.
	Muschler, G. F., H. Nitto, et al. (2001). "Age- and gender-related changes in the cellularity of human bone marrow and the prevalence of osteoblastic progenitors." <i>J Orthop Res</i> 19(1): 117-25.
	Nishimori, M., Y. Yamada, et al. (2002). "Health-related quality of life of unrelated bone marrow donors in Japan." <i>Blood</i> 99(6): 1995-2001.
	Orlic, D., J. Kajstura, et al. (2001). "Transplanted adult bone marrow cells repair myocardial infarcts in mice." <i>Ann N Y Acad Sci</i> 938: 221-9; discussion 229-30.
	Orlic, D., J. Kajstura, et al. (2001). "Bone marrow cells regenerate infarcted myocardium." <i>Nature</i> 410(6829): 701-5.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional) MA9658DIV 4		Application Number 10/614,648
Applicant(s) Fraser et al.		
Filing Date 7/7/03	Group Art Unit 1632	

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Palma, P. C., C. L. Ricetto, et al. (1997). "Repeated lipoinjections for stress urinary incontinence." <i>J Endourol</i> 11(1): 67-70.
	Pittenger, M. F., A. M. Mackay, et al. (1999). "Multilineage potential of adult human mesenchymal stem cells." <i>Science</i> 284(5411): 143-7.
	Prockop, D. J., S. A. Azizi, et al. (2000). "Potential use of marrow stromal cells as therapeutic vectors for diseases of the central nervous system." <i>Prog Brain Res</i> 128: 293-7.
	Rajnoch, C., J. C. Chachques, et al. (2001). "Cellular therapy reverses myocardial dysfunction." <i>J Thorac Cardiovasc Surg</i> 121(5): 871-8. t&artType=abs&id=a112937&target=.
	Shi, Q., S. Rafii, et al. (1998). "Evidence for circulating bone marrow-derived endothelial cells." <i>Blood</i> 92(2): 362-7.
	Strauer, B. E., M. Brehm, et al. (2002). "Repair of infarcted myocardium by autologous intracoronary mononuclear bone marrow cell transplantation in humans." <i>Circulation</i> 106(15): 1913-8.
	Takahashi, T., C. Kalka, et al. (1999). "Ischemia- and cytokine-induced mobilization of bone marrow-derived endothelial progenitor cells for neovascularization." <i>Nat Med</i> 5(4): 434-8.
	Thomas, E. D. (1994). "Stem Cell Transplantation: Past, Present and Future." <i>Stem Cells</i> 12: 539-544.
	Werlich, T., K. J. Stiller, et al. (1999). "Experimental studies on the stem cell concept of liver regeneration. II." <i>Exp Toxicol Pathol</i> 51(1): 93-8.
	Yavorkovsky, L., E. Lai, et al. (1995). "Participation of small intraportal stem cells in the restitutive response of the liver to periportal necrosis induced by allyl alcohol." <i>Hepatology</i> 21(6): 1702-12.
	Yin, L., D. Lynch, et al. (1999). "Participation of different cell types in the restitutive response of the rat liver to periportal injury induced by allyl alcohol." <i>J Hepatol</i> 31(3): 497-507.
	Zuk, P. A., M. Zhu, et al. (2001). "Multilineage cells from human adipose tissue: implications for cell- based therapies." <i>Tissue Eng</i> 7(2): 211-28.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM 1449*		Docket Number MA9658 DIV 4	Application Number 101614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,486,359	January 23, 1996 (EXHIBIT 1)	Caplan, et al.			
	5,728,739	March 17, 1998 (EXHIBIT 2)	Ailhaud et al.			
	5,827,740	October 27, 1998 (EXHIBIT 3)	Pittenger			
	5,827,897	October 27, 1998 (EXHIBIT 4)	Ailhaud, et al.			

FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES
	WO 98/04682	February 5, 1998 (EXHIBIT 5)	US			NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Considine, et al., "Paracrine stimulation of preadipocyte-enriched cell cultures by mature adipocytes," <i>American Journal of Physiology</i> 1996 270(5) E895-E899 (EXHIBIT 6)
	Dani, et al., "Differentiation of embryonic stem cells into adipocytes in vitro," <i>J. Cell Sci.</i> 1997 110, 1279-1285 (EXHIBIT 7)
	Entenmann, et al., "Relationship between replication and differentiation cultured human adipocyte precursor cells," <i>American Phys. Soc.</i> 1996 270,C1011-C1016 (EXHIBIT 8)
	Eslami Varzaneh, et al., "Extracellular Matrix Components Secreted by Microvascular Endothelial Cells Stimulate Preadipocyte Differentiation In Vitro," <i>Metabolism</i> 1994 43 (7), 906-912 (EXHIBIT 9)
	Hauner, et al., "Endothelin-1 Inhibits the Adipose Differentiation of Cultured Human Adipocyte Precursor Cells," <i>Metabolism</i> 1994 43(2) pp 227-232 (EXHIBIT 10)
	Hausman, et al., "The Influence of Extracellular Matrix Substrata on Preadipocyte Development in Serum-Free Cultures of Stromal-Vascular Cells," <i>J. Anim. Sci.</i> 1996 74(9), 2117-2128 (EXHIBIT 11)
	Hui-Ling et al., "Increased expression of G _α in mouse embryo stem cells promotes terminal differentiation to adipocytes," <i>American Physiological Society</i> 1993 265(6), C1729-C1735 (EXHIBIT 12)
	Marko, et al., "Isolation of a Preadipocyte Cell Line from Rat Bone Marrow and Differentiation to Adipocytes," <i>Endocrinology</i> 1995 136(10), 4582-4588 (EXHIBIT 13)
	Shillabeer, et al., "A novel method for studying preadipocyte differentiation <i>in vitro</i> ," <i>Intl. J. Obesity</i> 1996 20(Supp. 3), S77-S83 (EXHIBIT 14)
	Sorisky et al., "From preadipocyte to Adipocyte: Differentiation-Directed Signals of Insulin from the Cell Surface to the Nucleus," <i>Critical Review in Clinical Laboratory Sciences</i> 1999 36(1), 1-34 (EXHIBIT 15)

XAMINER	DATE CONSIDERED
---------	-----------------

XAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*		Docket Number MA9658D1v4	Application Number 10/614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER _____ DATE CONSIDERED _____
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*

Docket Number MA9658D1V4	Application Number 10/614,148
Applicant Fraser et al.	
Filing Date 7/7/03	Group Art Unit 1632

**INFORMATION DISCLOSURE STATEMENT
IN AN APPLICATION**

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,591,625 (Exhibit 19)	January 7, 1997	Gerson, et al.			
	5,786,207 (Exhibit 20)	July 28, 1998	Katz, et al.			
	5,827,735 (Exhibit 21)	October 27, 1998	Young, et al.			
	5,827,740 (Exhibit 22)	October 27, 1998	Pittenger			
	5,906,934 (Exhibit 23)	May 25, 1999	Grande, et al.			
	5,908,784 (Exhibit 24)	June 1, 1999	Johnstone et al.			
	6,200,606 B1 (Exhibit 25)	March 13, 2001	Peterson, et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Bennett, JH, et al., 1991 <i>J. Cell Sci.</i> "Adipocytic cells cultured from marrow have osteogenic potential," 99(Pt 1):131-139 (Exhibit 26)
		Beresford, et al., 1986 <i>Endo.</i> "1,25-Dihydroxyvitamin D ₃ and Human Bone-Derived Cells <i>in Vitro</i> : Effects on Alkaline Phosphatase, Type I Collagen and Proliferation," 119:1776-1785 (Exhibit 27)
		Bjornson, et al., 1999 <i>Science</i> "Turning Brain into Blood: A Hematopoietic Fate Adopted by Adult Neural Stem Cells <i>in Vivo</i> ," 283:534-537 (Exhibit 28)
		Bruder, et al., 1997 <i>J. Cell Biochem.</i> "Growth Kinetics, Self-Renewal, and the Osteogenic Potential of Purified Human Mesenchymal Stem Cells During Extensive Subcultivation and Following Cryopreservation," 64:278-294 (Exhibit 29)
		Butler-Browne, et al., 1990 <i>Anat. Embryol. (Berl)</i> "Myosin heavy and light chain expression during human skeletal muscle development and precocious muscle maturation induced by thyroid hormone," 181:513-522 (Exhibit 30)
		Cheng S-L, et al., 1994 <i>Endo</i> "Differentiation of Human Bone Marrow Osteogenic Stromal Cells <i>in Vitro</i> : Induction of the Osteoblast Phenotype by Dexamethasone," 134: 277-286 (Exhibit 31)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*		Docket Number MA9658Div4	Application Number 10/614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Chyun, et al., 1984 <i>Endo.</i> "Cortisol Decreases Bone Formation by Inhibiting Periosteal Cell Proliferation," 114:477-480 (Exhibit 32)
		Conget, PA and JJ Minguell 1999 <i>J. Cell. Physiol.</i> "Phenotypical and Functional Properties of Human Bone Marrow Mesenchymal Progenitor Cells," 181:67-73 (Exhibit 33)
		Cooper, et al., 1999 <i>J. Endocrinol.</i> "Glucocorticoid activity, inactivity and the osteoblast," 163:159-164 (Exhibit 34)
		Denker, A.E., et al., 1995 <i>Differentiation</i> "Formation of cartilage-like spheroids by micromass cultures of murine C3H101/2 cells upon treatment with transforming growth factor- β 1," 59: 25-34 (Exhibit 35)
		Denker, et al., 1999 <i>Differentiation</i> "Chondrogenic differentiation of murine C3H10T1/2 multipotential mesenchymal cells: I. Stimulation by bone morphogenetic protein-2 in high-density micromass cultures," 64:67-76 (Exhibit 36)
		Dimri, et. al., 1995 <i>Proc. Natl. Acad. Sci. USA</i> "A biomarker that identifies a senescent human cells in culture and in aging skin <i>in vivo</i> ," 92: 9363-9367 (Exhibit 37)
		Ducy, et. al., 1997 <i>Cell</i> "Osf2/Cbfa1: A Transcriptional Activator of Osteoblast Differentiation," 89:747-754 (Exhibit 38)
		Ferrari G., et al., 1998 <i>Science</i> "Muscle Regeneration by Bone Marrow-Derived Myogenic Progenitors," 279: 1528-1530 (Exhibit 39)
		Frederikson and McKay 1988 <i>J. Neurosci.</i> "Proliferation and Differentiation of Rat Neuroepithelial Precursor Cells <i>in vivo</i> ," 8:1144-1151 (Exhibit 40)
		Fridman, et al., 1992 <i>Int. J. Cancer</i> "Malignant Transformation of NIH-3T3 Cells After Subcutaneous co-Injection With A Reconstituted Basement Membrane (Matrigel)," 51(5), 740-44 (Exhibit 41)
		Grigoradis A., et al., 1988 <i>J. Cell Biol.</i> "Differentiation of Muscle, Fat, Cartilage, and Bone from Progenitor Cells Present in a Bone-derived Clonal Cell Population: Effect of Dexamethasone," 106: 2139-2151(Exhibit 42)
		Guerrero, V and JR Florini 1980 <i>Endocrinology</i> "Dexamethasone Effects on Myoblast Proliferation and differentiation," 106:1198-1202(Exhibit 43)
		Hall, BK 1981 "Intracellular and extracellular control of differentiation of cartilage and bone," <i>Histochem. J.</i> 13:599-614(Exhibit 44)
		Jaiswal, et al., 1997 "Osteogenic Differentiation of Purified, Culture-Expanded Human Mesenchymal Stem Cells In Vitro," <i>J. Cell Biochem.</i> 64:295-312(Exhibit 45)
		Johnstone B., et al., 1998 "In Vitro Chondrogenesis of Bone Marrow-Derived Mesenchymal Progenitor Cells," <i>Exp. Cell Res.</i> 238: 265-272(Exhibit 46)
		Kania, et al., 1990 "The <i>Drosophila</i> segmentation gene <i>runt</i> encodes a novel nuclear regulatory protein that is also expressed in the developing nervous system," <i>Genes Dev.</i> 4:1701-1713(Exhibit 47)
		Kehlen, A. et al., 2000 <i>J. Cell Biochem.</i> "Increased Lymphocytic Aminopeptidase N/CD13 Promoter Activity After Cell-Cells Contact," 80:115-123(Exhibit 48)
		Kosher, RA, et al., 1986 <i>J. Cell Biol.</i> "Collagen Gene Expression During Limb Cartilage Differentiation," 102:1151-1156(Exhibit 49)
		Kuri-Harcuch, W. et al., 1984, <i>Differentiation</i> "Extracellular matrix production by mouse 3T3-F442A cells during adipose differentiation in culture," 28(Exhibit 50)
		Lanier, L.L. et al, 1991 <i>J. Immunol.</i> "Molecular and Functional Analysis of Human Natural Killer Cell-Associated Neural Cells Adhesion Molecule (N-Cam/CD56)," 146:4421-4426(Exhibit 51)
		Lawson-Smith, M.J. and McGeachie, J.K. 1998 <i>J. Anat.</i> "The identification of myogenic cells in skeletal muscle, with emphasis on the use of tritiated thymidine autoradiography and desmin antibodies," 192:161-171 (Exhibit 52)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*		Docket Number MA9658D:U 4	Application Number 10/614, 648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/02	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
		Leboy, et al., 1991 <i>J. Cell Physiol.</i> "Dexamethasone Induction of Osteoblast mRNAs in Rat Marrow Stromal Cell Cultures," 146:370-378 (Exhibit 53)	
		Lendahl, et al., 1990 <i>Cell</i> "CNS Stem Cells Express a New Class of Intermediate Filament Protein," 60:585-595 (Exhibit 54)	
		Lenoir, N. 2000 <i>Science</i> "Europe Confronts The Embryonic Stem Cell Research Challenge," 287:1425-1427 (Exhibit 55)	
		Lumelsky, N., et al. 2001 <i>Science</i> "Differentiation of Embryonic Stem Cells to Insulin-Secreting Structures Similar to Pancreatic Islets," 292:1389-1394. (Exhibit 56)	
		Lynch, et al., 1995, <i>Exp. Cell Res.</i> "The Influence of Type I Collagen on the Development and Maintenance of the Osteoblast Phenotype in Primary and Passaged Rat Calvarial Osteoblasts: Modification of Expression of Genes Supporting Cell Growth, Adhesion, and Extracellular Matrix Mineralization," 216:35-45 (Exhibit 57)	
		Malaval, et al., 1994 <i>J. Cell. Physiol.</i> "Cellular Expression of Bone-Related Proteins During In Vitro Osteogenesis in Rat Bone Marrow Stromal Cell Culture," 158:555-572 (Exhibit 58)	
		Manduca, et al., 1992 <i>Eur. J. Cell Biol.</i> "Chondrogenic differentiation in chick embryo osteoblast cultures," 57:193-201 (Exhibit 59)	
		Martin, et al., 1999 <i>Exp. Cell Res.</i> "Mammalian Chondrocytes Expanded in the Presence of Fibroblast Growth Factor 2 Maintain the Ability to Differentiate and Regenerate Three-Dimensional Cartilaginous Tissue," 253:681-688 (Exhibit 60)	
		Megane, et al., 1996 <i>Genes Dev.</i> "MyoD is required for myogenic stem cell function in adult skeletal muscle," 10:1173-1183 (Exhibit 61)	
		Molkentin and Olson 1996 <i>Curr. Opin. Genet. Dev.</i> "Defining the regulatory networks for muscle development," 6:445-453 (Exhibit 62)	
		Mundlos, et al., 1997 <i>Cell</i> "Mutations Involving the Transcription Factor CBFA12 Cause Cleidocranial Dysplasia," 89:773-779 (Exhibit 63)	
		Nehls, A. and D Drenckhahn 1991 <i>J. Cell Biol.</i> "Heterogeneity of Microvascular Pericytes for Smooth Muscle Type Alpha-Actin," 113:147-154 (Exhibit 64)	
		Owen, TA, et al., 1990 <i>J. Cell Physiol.</i> "Progressive Development of the Rat Osteoblast Phenotype in Vitro: Reciprocal Relationships in Expression of Genes Associated with Osteoblast Proliferation and Differentiation During Formation of the Bone Extracellular Matrix," 143:420-430 (Exhibit 65)	
		Paul S.R., et al., 1991 <i>Blood</i> "Stromal Cell-Associated Hematopoiesis: Immortalization and Characterization of Primate Bone Marrow-Derived Stromal Cell Line," 77: 1723-33 (Exhibit 66)	
		Pittenger M.F., et al., 1999 <i>Science</i> "Multilineage Potential of Adult Human Mesenchymal Stem Cells," 284: 143-147 (Exhibit 67)	
		Prockop D.J. 1997 <i>Science</i> "Marrow Stromal Cells as Stem Cells for Nonhematopoietic Tissues," 276: 71-74 (Exhibit 68)	
		Rando, et al., 1995 <i>Exp. Cell Res.</i> "The Fate of Myoblasts Following Transportation into Mature Muscle," 220:383-389 (Exhibit 69)	
		Saalbach, A., et al., 1997 <i>Cell and Tiss. Res.</i> "The Fibroblast-specific MAb AS02: a novel tool for detection and elimination of human fibroblasts," 290:593-599 (Exhibit 70)	
		Sanchez-Ramos, et al., 2000 "Adult Bone Marrow Stromal Cells Differentiate into Neural Cells in Vitro." <i>Exp. Neurol.</i> 164:247-256 (Exhibit 71)	
		Seale and Rudnicki 2000 <i>Dev. Biol.</i> "A New Look at the Origin, Function, and "Stem-Cell" Status of Muscle Satellite Cells," 218:115-124 (Exhibit 72)	

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number	Application Number
	MA9658D1V4	10/6/14, 648
	Applicant	Fraser et al.
	Filing Date	Group Art Unit 7/7/03 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER _____ DATE CONSIDERED _____
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*		Docket Number MA9658 DU 4	Application Number 10/614, 648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)		Applicant Fraser et al.	
		Filing Date 7/7/03	Group Art Unit 1632

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)						
		Ankrom, Michael A., "Age-related changes in human oestrogen receptor function and levels in osteoblasts," <i>Biochem J.</i> 333:787-794. (Exhibit 88)				
		Aso, Hisashi, et al., "A Preadipocyte Clonal Line from bovine Intramuscular Adipose Tissue: Nonexpression of GLUT-4 protein during Adipocyte Differentiation," <i>Biochem. Biophys. Res. Commun.</i> 213:369-375. (Exhibit 89)				
		Bernalhr, David A. et al., "Tissue Specific Expression of p422 protein, A putative Lipid Carrier, In Mouse Adipocytes," <i>Biochem. Biophys. Res. Comun.</i> 1985 132:850-855. (Exhibit 90)				
		Cheifetz, S. et al., "Endoglin Is a Component of the Transforming Growth Factor- β Receptor System in Human Endothelial Cells," <i>J. Biol. Chem.</i> , 1992 267:19027-19030. (Exhibit 91)				
		Chen, Theresa L. et al., "1 α ,25-Dihydroxyvitamin D ₃ Receptors in Cultured Rat osteoblast-like Cells," <i>J. Biol. Chem.</i> 1983 258:4350-4355. (Exhibit 92)				
		Enomoto, Hirayuki et al., "Cbfal Is a Positive Regulatory Factor in Chondrocyte Maturation," <i>J. Biol. Chem.</i> 2000 275:8695-8702. (Exhibit 93)				
		Herman, Ira M. and Patricia D'Amore, "Microvascular Pericytes Contain Muscle and Nonmuscle Actins," <i>J. Cell Biol.</i> 1985 101:43-52. (Exhibit 94)				
		Lucas, Paul A. et al., "Mesenchymal Stem Cells From Granulation Tissue," <i>J. Cell Biochem</i> , 1993 17E:122, R212 (Exhibit 95)				
		Majeska, Robert J. and Gideon A. Rodan, "The Effect of 1,25(OH) ₂ D ₃ on Alkaline Phosphates in Osteoblastic Osteosarcoma Cells," <i>J. Biol. Chem.</i> 1982 257:3362-3365. (Exhibit 96)				
		Periasamy, Muthu et al., "Regulation of myosin heavy-chain gene expression during skeletal-muscle hypertrophy," <i>Biochem. J.</i> 1989 257:691-698. (Exhibit 97)				
		Poliard, a. et al., "Controlled Conversion of an Immortalized Mesodermal progenitor Cell Towards osteogenic, Chondrogenic, or Adipogenic Pathways," <i>J. Cell Biol.</i> 1995 130:1461-1472. (Exhibit 98)				
		Price, Paul A. et al., "Matrix GLA Protein, A New γ -Carboxyglutamic Acid-Containing Protein Which is Associated With The Organic Matrix of Bone," <i>Biochem. Biophys. Res. Commun.</i> , 1983 117:765-771. (Exhibit 99)				
		Rando, Thomas A. and Helen M. Blau, "Primary Mouse Myoblast Purification, Characterization, and Transplantation for Cell-mediated Gene Therapy," <i>J. Cell Biol</i> 1994 125:1275-1287. (Exhibit 100)				
		Weiner, Francis R. et al., "Regulation of collagen Gene Expression in 3T3-L1 Cells. Effects of Adipocyte Differentiation and Tumor necrosis Factor α ," <i>Biochem</i> 1989 28:4094-4099. (Exhibit 101)				

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449° INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number MA9658D1V4	Application Number 101614, 648
	Applicant Fraser et al.	
	Filing Date 7/7/03	Group Art Unit 1632

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*		Docket Number MA9658D1U4	Application Number 10/614, 648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,226,914 (Exhibit 105)	07/13/93	Caplan et al.			11/16/90
	5,736,396 (Exhibit 106)	04/07/98	Bruder et al.			01/24/95
	5,811,094 (Exhibit 107)	09/22/98	Caplan et al.			04/11/95
	5,817,050 (Exhibit 108)	10/06/98	Klein			05/29/97
	5,908,784 (Exhibit 109)	06/01/99	Johnstone et al.			11/15/96

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO
	WO97/18299 (Exhibit 110)	05/22/97	PCT			X
	WO97/39104 (Exhibit 111)	10/23/97	PCT			X
	WO97/40137 (Exhibit 112)	10/30/97	PCT			X
	WO97/41208 (Exhibit 113)	11/06/97	PCT			X
	WO98/20731 (Exhibit 114)	05/22/98	PCT			X
	WO98/32333 (Exhibit 115)	07/30/98	PCT			X
	WO98/51317 (Exhibit 116)	11/19/98	PCT			X
	WO99/01145 (Exhibit 117)	01/14/99	PCT			X
	WO99/03973 (Exhibit 118)	01/28/99	PCT			X
	WO99/11789 (Exhibit 119)	03/11/99	PCT			X

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Bastard, J. P. et al., "A Mini-Liposuction Technique Adapted to the Study of Human Adipocyte Glucose Transport System," <i>Diabetologia</i> , 36(Suppl. 1):A135, 1993 (Exhibit 120)
	Caplan, Arnold I., "The Mesengenic Process," <i>Clinics in Plastic Surgery</i> , 21:429-35, 1994 (Exhibit 121)
	Crandall, David L. et al., "Identification of Estrogen Receptor β RNA in Human Breast and Abdominal Subcutaneous Adipose Tissue," <i>Biochemical and Biophysical Research Communications</i> , 248:523-6, 1998 (Exhibit 122)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449)

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449*		Docket Number MA9658 DIV 4	Application Number 10/614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Hauner, Hans et al., "Promoting Effect of Glucocorticoids on the Differentiation of Human Adipocyte Precursor Cells Cultured in a Chemically Defined Medium," <i>Journal of Clinical Investigation</i> , 84:1663-70, 1989 (Exhibit 123)
		Hauner H. et al., "Glucocorticoids and Insulin Promote the Differentiation of Human Adipocyte Precursor Cells into Fat Cells," <i>Journal of Clinical Endocrinology and Metabolism</i> , 64:832-5, 1987 (Exhibit 124)
		Johnson, P. R. et al., "Uncontrolled adipocyte proliferation is not the primary lesion in the genetically-obese Zucker rat," <i>International Journal of Obesity</i> , 5:563-70, 1981 (Exhibit 125)
		Killinger, D. W. et al., "Influence of Adipose Tissue Distribution on the Biological Activity of Androgens," <i>Annals New York Academy of Sciences</i> , 595:199-211, 1990 (Exhibit 126)
		Killinger, Donald W. et al., "The Relationship Between Aromatase Activity and Body Fat Distribution," <i>Steroids</i> , 50:61-72, 1987 (Exhibit 127)
		Lafontan, M. et al., "Réflexions sur une nouvelle approche de chirurgie plastique réparatrice: la réimplantation de fragments de tissu adipeux prélevés par liposuccion," <i>Ann. Chir. Plast. Esthet.</i> , 34:77-81, 1989 (Exhibit 128)
		Lam, Anson and Ronald Moy, "The Potential for Fat Transplantation," <i>J. Dermatol. Surg. Oncol.</i> , 18:432-4, 1992 (Exhibit 129)
		Lecoeur, L. and J. P. Ouhayoun, "In vitro induction of osteogenic differentiation from non-osteogenic mesenchymal cells," <i>Biomaterials</i> , 18:989-93, 1997 (Exhibit 130)
		Loncar, D., "Ultrastructural analysis of differentiation of rat endoderm in vitro. Adipose vascular-stromal cells induce endoderm differentiation, which in turn induces differentiation of the vascular-stromal cells into chondrocytes," <i>J. Submicrosc. Cytol. Pathol.</i> , 24:509-19, 1992 (Exhibit 131)
		Novakofski, Jan E., "Primary Cell Culture of Adipose Tissue," <i>Biology of the Adipocyte: Research Approaches</i> , Van Nostrand Reinhold Company, NY, 1987 160-97 (Exhibit 132)
		Pedersen, S. B. et al., "Identification of oestrogen receptors and oestrogen receptor mRNA in human adipose tissue," <i>European Journal of Clinical Investigation</i> , 26:262-9, 1996 (Exhibit 133)
		Pettersson, Per et al., "Adipocyte Precursor Cells in Obese and Nonobese Humans," <i>Metabolism</i> , 34:808-12, 1985 (Exhibit 134)
		Ramsay, T. G. et al., "Pre-Adipocyte Proliferation and Differentiation in Response to Hormone Supplementation of Decapitated Fetal Pig Sera," <i>J. Anim. Sci.</i> , 64:735-44, 1987 (Exhibit 135)
		Rubens, F. D. et al., "Tissue Factor Expression by Cells Used for Sodding of Prosthetic Vascular Grafts," <i>Journal of Surgical Research</i> , 72:22-8, 1997 (Exhibit 136)
		Smahel, J., "Aspiration lipectomy and adipose tissue injection: pathophysiologic commentary," <i>European Journal of Plastic Surgery</i> , 14:126-31, 1991 (Exhibit 137)
		Springhorn, Jeremy P. et al., "Human Capillary Endothelial Cells from Abdominal Wall Adipose Tissue: Isolation Using an Anti-Pecam Antibody," <i>In Vitro Cellular & Developmental Biology-Animal</i> , 31:473-81, 1995 (Exhibit 138)
		Tavassoli, Mehdi, "In Vivo Development of Adipose Tissue Following Implantation of Lipid-Depleted Cultured Adipocyte," <i>Experimental Cell Research</i> , 137:55-62, 1982 (Exhibit 139)
		Williams, John T. et al., "Cells Isolated from Adult Human Skeletal Muscle Capable of Differentiating into Multiple Mesodermal Phenotypes," <i>The American Surgeon</i> , 65:22-6, 1999 (Exhibit 140)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449*		Docket Number MA9658D104	Application Number 10/614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Williams, Stuart K. et al., "Liposuction-derived human fat used for vascular graft sodding contains endothelial cells and not mesothelial cells as the major cell type," <i>Journal of Vascular Surgery</i> , 19:916-23, 1994 (Exhibit 141)
	Włodarski, Krzysztof H., "Section III. Basic Science and Pathology. Properties and Origin of Osteoblasts," <i>Clinical Orthopaedics and Related Research</i> , 252:276-93, 1990 (Exhibit 142)
	Ahrens, Patricia Buckley et al., "Stage-Related Capacity for Limb Chondrogenesis in Cell Culture," <i>Developmental Biology</i> , 1977, 60:69-82 (Exhibit 143)
	Alameddine, Hala S. et al., "Regeneration of Skeletal Muscle Fibers from Autologous Satellite Cells Multiplied In Vitro. An Experimental Model for Testing Cultured Cell Myogenicity," <i>Muscle & Nerve</i> , 1989, 12:544-55 (Exhibit 144)
	Angele, P. et al., "Engineering of Osteochondral Tissue with Bone Marrow Mesenchymal Progenitor Cells in a Derivatized Hyaluronan-Gelatin Composite Sponge," <i>Tissue Engineering</i> , 1999, 5:545-53 (Exhibit 145)
	Bailey, A. J. et al., "Age-Related Changes in the Biochemical Properties of Human Cancellous Bone Collagen: Relationship to Bone Strength," <i>Calcified Tissue International</i> , 1999, 65:203-10 (Exhibit 146)
	Barghorn, A. et al., "α-Smooth Muscle Actin Distribution in the Pulmonary Vasculature Comparing Hypoplastic and Normal Fetal Lungs," <i>Pediatric Pathology & Laboratory Medicine</i> , 1998, 18:5-22 (Exhibit 147)
	Baylink, David J., "Glucocorticoid-Induced Osteoporosis," <i>The New England Journal of Medicine</i> , 1983, 309:306-8 (Exhibit 148)
	Becerra, José et al., "Demineralized Bone Matrix Mediates Differentiation of Bone Marrow Stromal Cells In Vitro: Effect of Age of Cell Donor," <i>Journal of Bone and Mineral Research</i> , 1996, 11:1703-14 (Exhibit 149)
	Beiser, Ian H. and Irvin O. Kanat, "Subchondral Bone Drilling: A Treatment for Cartilage Defects," <i>Journal of Foot Surgery</i> , 1990, 29:595-601 (Exhibit 150)
	Breen, Ellen C. et al., "TGFβ Alters Growth and Differentiation Related Gene Expression in Proliferating Osteoblasts In Vitro, Preventing Development of the Mature Bone Phenotype," <i>Journal of Cellular Physiology</i> , 1994, 160:323-35 (Exhibit 151)
	Bruder, Scott P. et al., "Bone Regeneration by Implantation of Purified, Culture-Expanded Human Mesenchymal Stem Cells," <i>Journal of Orthopaedic Research</i> , 1998, 16:155-62 (Exhibit 152)
	Butnariu-Ephrat, Miriam et al., "Resurfacing of Goat Articular Cartilage by Chondrocytes Derived From Bone Marrow," <i>Clinical Orthopaedics and Related Research</i> , 1996, 330:234-43 (Exhibit 153)
	Campion, Dennis R., "The Muscle Satellite Cell: A Review," <i>International Review of Cytology</i> , 1984, 87:225-51 (Exhibit 154)
	Caplan, Arnold I., "Mesenchymal Stem Cells," <i>Journal of Orthopaedic Research</i> , 1991, 9:641-50 (Exhibit 155)
	Caplan, Arnold I., "The Mesengenic Process," <i>Clinics in Plastic Surgery</i> , 1994, 21:429-35 (Exhibit 156)
	Carranza-Bencano, A. et al., "Comparative Study of the Reconstruction of Articular Cartilage Defects with Free Costal Perichondrial Grafts and Free Tibial Periosteal Grafts: An Experimental Study on Rabbits," <i>Calcified Tissue International</i> , 1999, 65:402-7 (Exhibit 157)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*		Docket Number MA9658D1U4	Application Number 10/614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Chen, Xiaoli et al., "Differentiation-dependent expression of obese (ob) gene by preadipocytes and adipocytes in primary cultures of porcine stromal-vascular cells," <i>Biochimica et Biophysica Acta</i> , 1997, 1359:136-42 (Exhibit 158)
	Chimal-Monroy, Jesús and Lino Díaz de León, "Expression of N-cadherin, N-CAM, fibronectin tenascin is stimulated by TGF- β 1, β 2, β 3 and β 5 during the formation of precartilage condensations," <i>The International Journal of Developmental Biology</i> , 1999, 43:59-67 (Exhibit 159)
	Deng, Weiwen et al., "In Vitro Differentiation of Human Marrow Stromal Cells into Early Progenitors of Neural Cells by Conditions That Increase Intracellular Cyclic AMP," <i>Biochemical and Biophysical Research Communications</i> , 2001, 282:148-52 (Exhibit 160)
	Dennis, James E. et al., "A Quadripotential Mesenchymal Progenitor Cell Isolated from the Marrow of an Adult Mouse," <i>Journal of Bone and Mineral Research</i> , 1999, 14:700-9 (Exhibit 161)
	Dias, Peter et al., "The Molecular Basis of Skeletal Muscle Differentiation," <i>Seminars in Diagnostic Pathology</i> , 1994, 11:3-14 (Exhibit 162)
	Diefenderfer, David L. and Carl T. Brighton, "Microvascular Pericytes Express Aggrecan Message Which is Regulated by BMP-2," <i>Biochemical and Biophysical Research Communications</i> , 2000, 269:172-8 (Exhibit 163)
	Eisenberg, Shlomo, "High density lipoprotein metabolism," <i>Journal of Lipid Research</i> , 1984, 25:1017-58 (Exhibit 164)
	Fajas, Lluis, et al., "Transcriptional control of adipogenesis," <i>Current Opinion in Cell Biology</i> , 1998, 10:165-73 (Exhibit 165)
	Farndale, Richard W. et al., "Improved quantitation and discrimination of sulphated glycosaminoglycans by use of dimethylene blue," <i>Biochimica et Biophysica Acta</i> , 1986, 883:173-7 (Exhibit 166)
	Fülöp, Csaba et al., "Expression of Alternatively Spliced Epidermal Growth Factor-like Domains in Aggrecans of Different Species," <i>The Journal of Biological Chemistry</i> , 1993, 268:17377-83 (Exhibit 167)
	Glowacki, J., "Influence of Age on Human Marrow," <i>Calcified Tissue International</i> , 1995, 56(Suppl. 1):S50-1 (Exhibit 168)
	Grigoriadis, Agamemnon E. et al., "Analysis of chondroprogenitor frequency and cartilage differentiation in a novel family of clonal chondrogenic rat cell lines," <i>Differentiation</i> , 1996, 60:299-307 (Exhibit 169)
	Hardingham, Tim et al., "Studies on the Synthesis, Secretion and Assembly of Proteoglycan Aggregates by Chondrocytes," <i>Matrices and Cell Differentiation</i> , 1984, 151:17-29 (Exhibit 170)
	Haynesworth, S. E. et al., "Cell Surface Antigen on Human Marrow-Derived Mesenchymal Cells are Detected by Monoclonal Antibodies," <i>Bone</i> , 1992, 13:69-80 (Exhibit 171)
	Huss, Ralf, "Isolation of Primary and Immortalized CD34 ⁺ Hematopoietic and Mesenchymal Stem Cells from Various Sources," <i>Stem Cells</i> , 2000, 18:1-9 (Exhibit 172)
	Iwasaki, Motoki et al., "Regulation of Proliferation and Osteochondrogenic Differentiation of Periosteum-Derived Cells by Transforming Growth Factor- β and Basic Fibroblast Growth Factor," <i>Journal of Bone and Joint Surgery</i> , 1995, 77A:543-54 (Exhibit 173)
	Katz, Adam J. et al., "Emerging Approaches to the Tissue Engineering of Fat," <i>Clinics in Plastic Surgery</i> , 1999, 26:587-603 (Exhibit 174)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449*		Docket Number MA9658D1U 4	Application Number 10/614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/02	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
		Kirsch, Thorsten and Klaus von der Mark, "Remodelling of collagen types I, II and X and calcification of human fetal cartilage," <i>Bone and Mineral</i> , 1992, 18:107-17 (Exhibit 175)	
		Kosher, Robert A. and Michael Solorsh, "Widespread Distribution of Type II Collagen during Embryonic Chick Development," <i>Developmental Biology</i> , 1989, 131:558-66 (Exhibit 176)	
		Lazarus, Hillard M. et al., "Human Bone Marrow-Derived Mesenchymal (Stromal) Progenitor Cells (MPCs) Cannot Be Recovered from Peripheral Blood Progenitor Cell Collections," <i>Journal of Hematology</i> , 1997, 6:447-55 (Exhibit 177)	
		Leboy, Phoebe S. et al., "Ascorbic Acid Induces Alkaline Phosphatase, Type X Collagen, and Calcium Deposition in Cultured Chick Chondrocytes," <i>The Journal of Biological Chemistry</i> , 1989, 264:17281-6 (Exhibit 178)	
		Lee, Yun-Shain and Cheng-Ming Chuong, "Adhesion Molecules in Skeletogenesis: I. Transient Expression of Neural Cell Adhesion Molecules (NCAM) in Osteoblasts During Endochondral and Intramembranous Ossification," <i>Journal of Bone and Mineral Research</i> , 1992, 7:1435-46 (Exhibit 179)	
		Lennon, Donald P. et al., "Human and Animal Mesenchymal Progenitor Cells from Bone Marrow: Identification of Serum for Optimal Selection and Proliferation," <i>In Vitro Cell. Dev. Biol. - Animal</i> , 1996, 32:602-11 (Exhibit 180)	
		Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," <i>J. Histochem. Cytochem.</i> , 1964, 12:309-10 (Exhibit 181)	
		Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells," <i>The Journals of Gerontology</i> , 1999, 54A:B54-62 (Exhibit 182)	
		Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," <i>In Vitro Cell Dev. Biol.</i> , 1992, 28:154A (Exhibit 183)	
		MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," <i>Annu. Rev. Biochem.</i> , 1995, 64:345-73 (Exhibit 184)	
		Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," <i>Development</i> , 1992, 116:201-11 (Exhibit 185)	
		Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," <i>Lymphology</i> , 1987, 20:20-4 (Exhibit 186)	
		Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," <i>Bone</i> , 1990, 11:181-8 (Exhibit 187)	
		Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," <i>Oncology</i> , 2000, 58:319-23 (Exhibit 188)	
		O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," <i>Journal of Bone and Joint Surgery</i> , 1998, 80A:1795-812 (Exhibit 189)	
		Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," <i>Cell</i> , 1996, 85:1-4 (Exhibit 190)	
		Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," <i>Proc. Natl. Acad. Sci. USA</i> , 1979, 76:5138-42 (Exhibit 191)	
		Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," <i>Bone</i> , 1999, 24:549-54 (Exhibit 192)	

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449*		Docket Number MA9658D1U4	Application Number 101614, 648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Pettersson, Per et al., "Cells in Human Adipose Tissue Developing into Adipocytes," <i>Acta Med Scand</i> , 1984, 215:447-51 (Exhibit 193)
	Pierelli, Luca et al., "CD34+/CD105+ cells are enriched in primitive circulating progenitors residing in the G0 phase of the cell cycle and contain all bone marrow and cord blood CD34+/CD38 ^{low} precursors," <i>British Journal of Haematology</i> , 2000, 108:610-20 (Exhibit 194)
	Price, Paul A., "GLA-Containing Proteins of Bone," <i>Connective Tissue Research</i> , 1989, 21:51-60 (Exhibit 195)
	Price, Paul A. and Sharon A. Baukol, "1,25-Dihydroxyvitamin D ₃ Increases Synthesis of the Vitamin K-dependent Bone Protein by Osteosarcoma Cells," <i>The Journal of Biological Chemistry</i> , 1980, 255:11660-3 (Exhibit 196)
	Probst, M. et al., "Homologous bladder augmentation in dog with the bladder acellular matrix graft," <i>BJU International</i> , 2000, 85:362-71 (Exhibit 197)
	Richardson, J. B. et al., "Repair of human articular cartilage after implantation of autologous chondrocytes," <i>The Journal of Bone and Joint Surgery</i> , 1999, 81:1064-8 (Exhibit 198)
	Rickard, David J. et al., "Isolation and Characterization of Osteoblast Precursor Cells from Human Bone Marrow," <i>Journal of Bone and Mineral Research</i> , 1996, 11:312-24 (Exhibit 199)
	Samat, Harvey B. et al., "Neuronal nuclear antigen (NeuN): a marker of neuronal maturation in the early human fetal nervous system," <i>Brain & Development</i> , 1998, 20:88-94 (Exhibit 200)
	Scott, Douglas M. et al., "Collagen Synthesis in Cultured Osteoblast-like Cells," <i>Archives of Biochemistry and Biophysics</i> , 1980, 201:384-91 (Exhibit 201)
	Shalhoub, Victoria et al., "Downregulation of Cell Growth and Cell Cycle Regulated Genes during Chick Osteoblast Differentiation with the Reciprocal Expression of Histone Gene Variants," <i>Biochemistry</i> , 1989, 28:5318-22 (Exhibit 202)
	Siffert, Robert S., "The Role of Alkaline Phosphatase in Osteogenesis," <i>The Journal of Experimental Medicine</i> , 1951, 93:415-26 (Exhibit 203)
	Syrjälä, M. et al., "A flow cytometric assay of CD34-positive cell populations in the bone marrow," <i>British Journal of Haematology</i> , 1994, 88:679-84 (Exhibit 204)
	Tacchetti, C. et al., "In Vitro Morphogenesis of Chick Embryo Hypertrophic Cartilage," <i>The Journal of Cell Biology</i> , 1987, 105:999-1006 (Exhibit 205)
	Tontonoz, Peter et al., "mPPAR γ 2: tissue-specific regulator of an adipocyte enhancer," <i>Genes & Development</i> , 1994, 8:1224-34 (Exhibit 206)
	Trayhurn, P. and Margaret Ashwell, "Control of white and brown adipose tissues by the autonomic nervous system," <i>The Proceedings of the Nutrition Society</i> , 1987, 46:135-42 (Exhibit 207)
	Vandenburgh, Herman H. and Patricia Karlisch, "Longitudinal Growth of Skeletal Myotubes In Vitro in a New Horizontal Mechanical Cell Stimulator," <i>In Vitro Cellular & Developmental Biology</i> , 1989, 25:607-16 (Exhibit 208)
	Wakitani, Shigeyuki et al., "Mesenchymal Cell-Based Repair of Large, Full-Thickness Defects of Articular Cartilage," <i>The Journal of Bone and Joint Surgery</i> , 1994, 76A:579-92 (Exhibit 209)
	Wakitani, Shigeyuki et al., "Myogenic Cells Derived from Rat Bone Marrow Mesenchymal Stem Cells Exposed to 5-Azacytidine," <i>Muscle & Nerve</i> , 1995, 18:1417-26 (Exhibit 210)
	Weintraub, Harold et al., "Tissue-specific gene activation by MyoD: determination of specificity by <i>cis</i> -acting repression elements," <i>Genes & Development</i> , 1994, 8:2203-11 (Exhibit 211)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449°		Docket Number MA9658 DW 4	Application Number 10/614, 648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION		Applicant Fraser et al.	
(Use several sheets if necessary)		Filing Date 7/7/03	Group Art Unit 1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance. Initials or signature is required for each reference considered. A line through the reference number indicates the reference is not in conformance.	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449*	Docket Number MA9658D1V4	Application Number 10/614,648
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.	
(Use several sheets if necessary)	Filing Date 7/7/03	Group Art Unit 1632

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)		Docket Number MA9658 DIV 4	Application Number 10/614,648
		Applicant Fraser et al.	
		Filing Date 7/7/03	Group Art Unit 1632

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,854,292	December 29, 1998 (Exhibit 235)	Ailhaud et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 99/28444 (Exhibit 223)	June 10, 1999	PCT				
	WO 99/02654 (Exhibit 224)	January 21, 1999	PCT				
	WO 00/53795 (Exhibit 231)	September 14, 2000	PCT				
	WO 01/62901 A2 (Exhibit 232)	August 30, 2001	PCT				
	WO 01/21767 (Exhibit 233)	March 29, 2001	PCT				
	WO 97/26326 (Exhibit 236)	July 24, 1997	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Stashower et al., 1999, "Stromal progenitor cells present within liposuction and reduction abdominoplasty fat for autologous transfer to aged skin," <i>Dermatologic Surgery</i> , 25:12:945-949. (Exhibit 227)
	Strutt et al., 1996, "Growth and differentiation of human adipose stromal cells in culture," <i>methods in Molecular Medicine: Human Cell Culture Protocols</i> , 41-51. (Exhibit 228)
	Tavassoli et al., 1981, "The Nature of Fibroblasts Derived From Adipose Tissue In-Vitro," <i>Clinical Research</i> , 29:5:871A. (Exhibit 229)
	Van et al., 1978, "Complete Differentiation of Adipocyte Precursors," <i>Cell Tissue</i> , 195:317-329. (Exhibit 230)
	Soda, et al., 1983, "Adipocyte stem cell: A brief review," <i>Int. J. of Cell Cloning</i> , 1:79-84. (Exhibit 234)
	Ailhaud, et al., 1983, "Hormonal requirements for growth and differentiation of OB17 preadipocyte cells in vitro," <i>Diabète & Métabolisme</i> , Vol. 9:125-133. (Exhibit 237)
	Ailhaud, et al., 1985, "Lipoprotiene lipase et differenciation adipocytaire," <i>Reprod. Nutr. Develop.</i> , Vol. 25:153-158. (Exhibit 238)
	Zuk, Patricia A. et al., "Human Adipose Tissue Is A Source Of Multipotent Stem Cells," <i>Molecular Biology of the Cell</i> , 2002, 13:4279-4295. (Exhibit 239)
	Gimble, Jeffery M. et al., "Adipose tissue-derived therapeutics," <i>Expert Opin. Biol.</i> , 2003, 3(5):705-713. (Exhibit 240)
	Safford, Kristine M. et al., "Neurogenic differentiation of murine and human adipose-derived stromal cells," <i>Biochemical and Biophysical Research Communications</i> , 2002, 371-379. (Exhibit 241)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.